

On COLEOPTERA, mostly from Queensland.

(Part II.)¹

By ARTHUR M. LEA, F.E.S.

(Contribution from South Australian Museum).

MR. HACKER, the Entomologist of the Queensland Museum, has recently collected in the National Park of Queensland (several other entomologists have also collected there), and from the mass of material taken it is evident that this is one of the richest places in Australia for insects. This is very fortunate on account of the immense clearings of forests that have occurred in the coastal districts of Queensland and northern New South Wales.

MALACODERMIDÆ.

Metriorrhynchus connexus n. sp.

♂. Black, sides of prothorax and elytra (except for a large discal blotch) reddish testaceous.

Rostrum absent. Antennæ long, extending to about the middle of the elytral blotch, rather strongly serrated, third joint slightly longer than fourth, the others very feebly decreasing in length, but eleventh about as long as third. Prothorax five-areolate, moderately transverse, hind angles acutely triangular. Elytra narrow, sides almost parallel to near apex; with irregular single rows of punctures on most of the surface, becoming double on basal fifth on each side and about the tips. Abdominal notch deep. Length, 7.0-7.5 mm.

♀. Differs in having the antennæ shorter and less strongly serrated, elytra not quite so parallel-sided and abdomen not notched.

Queensland: National Park in December (H. Hacker). Types, in Queensland Museum.

An unusually interesting species. The elytral punctures are in irregular single series for most of their extent, but are in double series in places. Regarding them as in single series, the postmedian blotch on the elytra readily distinguishes the species from all previously described ones; this blotch also distinguishes from all the species in which the pronotum is five-areolate. The median areolet of the prothorax extends almost to the apex, and the latero-apical ones are sharply defined by their carinæ. The black part of the prothorax is complete from base to apex, with the pale portion on each side wider at the base than apex; on the elytra the blotch is postmedian and extends to about one-fifth from the apex and to about one-third (of each elytron) from the sides; it differs slightly on the two specimens.

Metriorrhynchus filirostris n. sp.

♀. Black, prothorax, elytra, and sides of scutellum reddish testaceous.

Rostrum thin and slightly longer than prothorax. Antennæ moderately long and serrated, third joint rather long, slightly longer than eleventh, and

¹ Part I. in *Memoirs Qld. Museum*, VII, pt. iii, 4th Novr., 1921.

distinctly longer than fourth, the others feebly decreasing in length. Prothorax moderately transverse, sides almost evenly increasing in width to base, hind angles acute; regularly seven-areolate. Elytra thin, parallel-sided; with regular double rows of punctures, the alternate interstices distinctly elevated. Length, 10 mm.

Queensland: Cairns district (F. P. Dodd). Type (unique), in South Australian Museum.

The rostrum is decidedly longer and thinner than on *M. nigripes*, *textilis*, *uniformis*, *ramicornis*, and *sculpticollis*, being much as on many specimens of *M. rhipidius*, and slightly longer than the prothorax.

Metriorrhynchus decipiens n. sp.

♂. Black, sides of prothorax and most of elytra reddish testaceous.

Rostrum moderately long, but, excluding the lips, not quite as long as wide; antennæ moderately long, strongly serrated or subpectinated, third joint distinctly longer than fourth and slightly longer than eleventh. Prothorax moderately transverse, sides dilated and elevated to base, regularly seven-areolate. Elytra narrow, parallel-sided to near apex; with regular double rows of transverse or subquadrate punctures, alternate interstices moderately elevated. Abdomen deeply notched. Length, 11-12 mm.

♀. Differs in having antennæ somewhat shorter and less strongly serrated and abdomen not notched.

Queensland: National Park in December. New South Wales: Tooloom in January (H. Hacker). Type, in Queensland Museum; cotype, in South Australian Museum.

The rostrum is not quite as long as on *M. variipennis*, and the sides of the prothorax are more evenly dilated to the base. Less of the elytra are black than on *M. ordinarius*, and the rostrum is distinctly shorter. At first glance the species appears to belong to *M. medioniger*, but the prothorax has the sides more dilated to the base and the rostrum is distinctly longer; that species belongs to a section of the genus in which the rostrum is very short or absent. The moderately long rostrum is much as on *M. irregularis*, but the size is larger and the elytra are partly black. About the median half of the prothorax is black, on the elytra the black part extends across three rows of puncture on each side of the suture at the base, but is narrowed and terminates at the basal third. The tips of the abdominal segments are very narrowly pale, but the pale parts could be easily overlooked. The specimen from Tooloom has the black part of the elytra extending almost across the entire base, and continued to well beyond the middle, but with the black part of the ridges terminated before that of the depressed parts.

Metriorrhynchus pertenuis n. sp.

♂. Blackish, sides and apex of prothorax, elytra, base of front and of middle femora and the coxæ flavo-testaceous.

Rostrum moderately long, including the lips slightly longer than wide. Antennæ rather long and strongly serrated, third joint slightly longer than fourth, the eleventh very little longer than tenth. Prothorax about as long as the basal width, which is decidedly more than that of apex, sides almost parallel on apical half, triangularly dilated posteriorly; regularly seven-areolate. Elytra very narrow;

with regular double rows of punctures over most of the surface, but on parts of the inner half with irregular single rows, the alternate interstices moderately elevated above the others. Abdomen deeply notched. Length, 6-9 mm.

♀. Differs in having the antennæ shorter and less strongly serrated, and abdomen not notched.

Queensland: Cairns district (F. P. Dodd). Type, in South Australian Museum; cotype, in Queensland Museum.

An unusually narrow species, the prothorax with or without a black or infusate patch touching neither the apex nor sides, but (when present) usually touching the base. There is occasionally a slight infuscation about the scutellum, the three basal joints of the antennæ are sometimes partly pale, especially on the under surface. The rostrum is distinct but not long.

***Metriorrhynchus insignipes* n. sp.**

♂. Black, prothorax (a mediobasal blotch excepted) and elytra brick-red.

Rostrum about as long as wide, but, excluding the lips, somewhat transverse. Antennæ moderately long, not very strongly serrated, with rather long pubescence inwardly. Prothorax in middle almost as long as the greatest width, middle angularly produced, sides parallel to about middle, then dilated and elevated, and then narrowed to base; regularly seven-areolate. Elytra parallel-sided to near apex; with regular double rows of punctures, the alternate interstices moderately elevated. Abdomen deeply notched. Hind tibiæ wide, each with a wide notched flange, commencing about the middle and extending almost to level with the apex. Length, 9-10 mm.

♀. Differs in having the antennæ somewhat shorter and less serrated, their clothing short, abdomen not notched, and hind tibiæ simple.

New South Wales: Howell (J. F. Stephen). Type, in Lea collection.

The projection on the hind tibia is a compound one and nearer the apex than base; it is somewhat similar (although not exactly the same) to that on *M. tibialis*, but the species is a larger one, and the elytra are entirely reddish. The blotch on the pronotum is confined to the mediobasal areolet and to not quite half of each of the laterobasal ones.

***Metriorrhynchus hackeri* n. sp.**

♂. Black, sides of prothorax and elytra brick-red.

Rostrum short, moderately transverse if lips included, strongly transverse without them. Antennæ rather long, strongly serrated or subpectinated. Prothorax moderately transverse, front somewhat produced and slightly notched in middle, sides subparallel to middle, then obliquely dilated and elevated and then almost parallel to base; regularly seven-areolate. Elytra with sides feebly dilated from beyond middle to near apex: with regular double rows of square punctures, the alternate interstices moderately elevated. Abdomen deeply notched. Hind tibiæ with a thin, flat, truncated flange, commencing near the base and diverging at an angle of about 15 degrees. Length, 10-11 mm.

♀. Differs in having antennæ shorter and less strongly serrated, abdomen not notched, and hind tibiæ simple.

Queensland: National Park, in December (H. Hacker). Type, in Queensland Museum; cotype, in South Australian Museum.

Another species with remarkable hind tibiae in the male. On the preceding one the flap is considerably wider, notched at its apex and commences nearer the apex. On *M. tibialis* the projection is partly free and commences nearer the base than apex, but is more median and of different shape; that species is also considerably smaller, and has the elytra widely tipped with black. On *M. dentipes* (which differs considerably in colours also) the projection on the hind tibiae is nearer the apex than base, and is a dilated part of the lower surface; on the present species it is a flap, and is nearer the base than the apex. Of the species with simple hind tibiae in the male which resemble it in colour, *M. lateralis* has a long rostrum, *M. variipennis* and *cryptoleucus* are wider, with the rostrum longer, and *M. irregularis* has a somewhat longer rostrum.

The great superficial resemblances between many species of *Metriorrhynchus*, and allied genera, render it desirable that every specimen should be critically examined. I know of no other subfamily of beetles in which species may be readily separated by profound differences of sculpture and which yet so strongly resemble each other that they could be easily misidentified.

***Metriorrhynchus mollicollis* n. sp.**

♂. Black, elytra brick-red.

Rostrum absent. Antennae rather long, joints pectinate or subramose. Prothorax distinctly transverse, sides almost parallel throughout; regularly seven-areolate. Elytra narrow, parallel-sided to near apex; with regular double rows of punctures, the alternate interstices moderately elevated. Abdomen with a deep notch. Length, 10-11 mm.

Queensland: National Park, in December (H. Hacker). New South Wales: Jenolan (J. C. Wiburd). Type, in Queensland Museum; eotype, in South Australian Museum.

Strikingly close in appearance to the typical form of *M. rufipennis*. The specimen from Jenolan has been known to me for many years, and there is another, from the Upper Williams River, in the collection of Mr. F. Erasmus Wilson; I previously considered they were possibly aberrant specimens of *rufipennis*, but the examination of four fresh specimens, taken by Mr. Hacker, renders it certain that the species is a distinct one. It differs from that species in having the produced parts of the antennae longer (these by themselves would not be conclusive, and the Jenolan specimen has them shorter than the others), the rostrum even shorter (practically absent) but in particular by the prothorax; this has a velvety appearance, is distinctly shorter, more parallel-sided, and the hind angles almost rectangular, the mediofrontal arcolets are wider, and the mediobasal one less dilated at its apical third. The produced parts of the third and tenth joints of the antennae of the Queensland specimen are slightly shorter than the outer edge of their supporting joints, but on the fourth to ninth they are longer, the eleventh joint is about twice the length of the outer edge of the tenth.

***Metriorrhynchus longicollis* n. sp.**

♂. Black, basal two-thirds or three-fourths of elytra brick-red.

Rostrum extremely short (practically absent). Antennae rather long, third-tenth joints pectinate, produced part of third shorter than its support, of fourth

and tenth about as long, of the intervening ones longer. Prothorax, along middle, slightly longer than wide, apex triangularly produced, sides slightly notched at basal third; seven-areolate, the frontal areolets granulate-punctate. Elytra narrow, parallel-sided to near apex; with double rows of punctures mostly even, the alternate interstices elevated. Abdomen deeply notched. Length, 7-10 mm.

♀. Differs in having the antennæ strongly serrated only, and abdomen not notched.

Queensland: National Park, in December (H. Hacker). Type, in Queensland Museum; cotype, in South Australian Museum.

Of the three frontal carinæ on the pronotum the median one is continuous to the apex, the others terminate some distance before it, except that the one on the right, on one specimen only, is continuous. On *M. brisbanensis* and *togatus* (which it greatly resembles) the prothorax is more transverse, not conspicuously produced in the middle, the carinæ completely margin the areolets, and the antennæ of the male are strongly serrated only. *M. batesi* is a much larger species, with very different prothorax. A line drawn across the prothorax, connecting the front of the sides, would cut off a triangle rather more than one-third the length (along the middle) of the segment.

Metriorrhynchus pectinicornis n. sp.

♂. Black or blackish and pale brick-red.

Rostrum very short (practically absent). Antennæ moderately long, strongly pectinated. Prothorax moderately transverse, apex widely triangularly produced, sides slightly notched in middle, hind angles slightly produced outwards, regularly seven-areolate, except that the submedian costæ are not quite continuous to apex. Elytra narrow; with regular double rows of punctures, the alternate interstices moderately elevated. Abdomen deeply notched. Length, 8.5-9.5 mm.

Queensland: Meringa, in January (F. H. Taylor). Type, in National Museum; cotype, in South Australian Museum.

In general appearance like *M. posticalis*, and some specimens of *M. cinctus*, but all prothoracic areolets well defined, alternate interstices of elytra more conspicuously elevated, and not quite so much of apex black. The antennæ are very different from those of the males of *M. crassipes*, *trichocerus*, and *eucerus*; the rostrum is much longer on *M. apicalis*, *abdominalis*, *melaspis*, and *dentipes*. *M. compositus* has strongly serrated antennæ in the male (the only sex known), but not pectinated. On the type the pale parts are the prothorax, scutellum, basal four-fifths of elytra, sterna, coxæ, and basal third of femora; on the second specimen the metasternum is deeply infuscated, but elsewhere the colours are the same. On the type the produced parts of the third and tenth joints of antennæ are slightly longer than their supports, on the intervening joints they are much longer, on several of them almost twice as long; on the second specimen they are shorter, although decidedly pectinate.

A specimen from North Australia (Groote Eylandt, N. B. Tindale) is much as the second specimen from Queensland, but is less brightly coloured, and a greater portion of each femur is dark.

Metriorrhynchus semiflavus n. sp.

♂. Black, prothorax, scutellum, basal third of elytra, coxæ, trochanters, prosternum, and mesosternum flavous.

Rostrum absent. Antennæ strongly serrated or subpectinated. Prothorax moderately transverse, sides notched in middle and strongly triangularly dilated to base; regularly seven-areolate. Elytra narrow, parallel-sided to near apex; with regular double rows of punctures, the alternate interstices moderately elevated on basal half, very feebly elevated posteriorly. Abdomen deeply notched. Length, 8 mm.

Queensland: Kuranda (F. P. Dodd). Type (unique), in South Australian Museum.

Of the shades of colour of some specimens of *M. longicornis*, but pale portion of elytra longer and scutellum pale, the alternate interstices of elytra are also less strongly elevated, posteriorly being scarcely different from the others. It is strikingly like *M. ampliatus* and *Trichalus semiatratatus*; the former has very different prothoracic arcolelets, and the latter differs in generic features.

Metriorrhynchus uniseriatus Lea.

Mr. Hacker has taken, in the National Park of Queensland, some specimens that are considerably larger than usual (up to 11 mm.)

Metriorrhynchus mimicus Lea.

A specimen from Apollo Bay in the National Museum evidently belongs to this species, but differs from the type in having the elytral margins red almost to the base, and the red curved round the suture for a short distance, but the tips (except for the margins) not reddish.

Metriorrhynchus crassipes Lea.

Six specimens of this species were recently taken on Groote Eylandt: the female differs from the male in having the antennæ distinctly shorter and less serrated and the abdomen not notched. The pale portion of the abdomen is variable; sometimes two segments only are pale, sometimes three, or two and part of a third; at first glance the pale segments are suggestive of the phosphorescent parts of fireflies (*Luciola* spp.).

Trichalus metasternalis n. sp.

♂. Black and flavous.

Rostrum absent. Antennæ slightly passing flavous part of elytra; third joint suboblong, fourth-tenth moderately serrated, eleventh narrowly elliptic, slightly longer than tenth. Prothorax distinctly transverse, base (except that the hind angles are produced outwards) very little wider than apex; triareolate, the median arcolelet narrow and continued to apical fourth. Elytra narrow, parallel-sided to near apex; subsutural costa trifurcate near base, elsewhere with regular double rows of punctures, the alternate interstices moderately elevated. Abdominal notch deep. Length, 6-8 mm.

♀. Differs in having the antennæ shorter and less serrated, and abdomen not notched.

North Australia : Darwin (G. F. Hill). Type, in South Australian Museum ; cotype, in Queensland Museum.

The prothorax is more transverse than on *T. placidus*, and the antennæ are shorter and more of apex of elytra is dark. The hind angles of prothorax, distinctly although not strongly produced outwards, distinguish from *T. sulcatus* ; rather more of apex of elytra is black, and the metasternum and legs vary somewhat in colour (as they also do on *sulcatus*). The flavous parts are the prothorax, scutellum, basal three-fifths of elytra, prosternum, mesosternum, coxæ, and base of femora. Of four females three have the under parts coloured as on the male, on the other the metasternum is deeply infuscated.

Two females, from Groote Eylandt (N. B. Tindale), differ from the others in having the hind angles of the prothorax more produced outwards ; one of them has the metasternum flavous, on the other it is deeply infuscated.

Trichalus sulcatus Waterh.

Three specimens, from North Australia (Darwin and Melville Island), apparently belong to this species, but have the femora entirely pale (except that their tips are slightly infuscated) and tibiæ partly pale. On one of them the under surface is pale, except that the tip of the abdomen is infuscated. On another the two basal segments only are infuscated at their tips ; these two specimens also have the three basal joints of antennæ entirely pale and parts of the following joints. On Queensland specimens of *T. sulcatus*, however, the under surface and legs vary in colour. On the third specimen the abdomen is blackish, except that the four basal segments are pale on each side.

Heteromastix irregularis n. sp.

♂. Flavous ; head, fourth to eleventh joints of antennæ and most of third, scutellum, apical fourth of elytra, metasternum, abdomen, and tarsi black or infuscated.

Head shallowly depressed between eyes. Third joint of antennæ about as long as first, but much wider, produced on one side of apex, fourth longer and slightly wider than third and also produced on one side of apex, fifth about as long as fourth but narrower, dilated on one side of middle, the following joints narrow, cylindrical, and slightly decreasing in length, but the eleventh slightly longer than tenth. Prothorax at base about once and one-half as wide as the median length, sides evenly elevated and rounded ; without distinct punctures. Elytra about as wide as the widest part of prothorax ; with dense and small, rugulose punctures. Abdominal notch distinct. Front tibiæ with a small notch and spine at the inner apex, basal joint of front tarsi with an inner notch or curve. Length, 4.5-5.0 mm.

♀. Differs in having the head smaller and gently convex between eyes ; and antennæ, abdomen, and front legs simple.

Queensland : Brookfield, in October (H. Hacker). Types, in Queensland Museum.

Only three species were previously known with the third to fifth joints of antennæ distorted in male ; of these *H. distortus* has elytra entirely dark and tibiæ partly infuscated ; the figure of its antennæ² will give a good general idea of that

² Lea, Trans. Ent. Soc. Lond., 1909, pl. iii, fig. 32.

of this species. *H. inflatus* has antennæ entirely dark, third joint of male much smaller, and fifth differently formed, the elytra also have about half of the apex dark and legs (except an obscure portion of the front ones) entirely blackish. *H. microcerus* has the tenth and eleventh joints of antennæ also distorted.

Heteromastix terminalis n. sp.

♂. Flavous, apical fourth of elytra and abdomen infuscated.

Head gently convex and with two small impressions between eyes. Antennæ not very long, third joint slightly longer than fourth, the others to ninth subequal, tenth dilated to apex, one side of which is slightly notched, eleventh distorted and about as long as ninth and tenth combined. Prothorax almost twice as wide as long, sides evenly elevated and somewhat oblique. Elytra parallel-sided; with dense and fine rugulose punctures. Abdomen with a deep apical notch. Length, 3.5-4.0 mm.

Queensland: Cairns district (F. P. Dodd). Type, in South Australian Museum.

From *H. melanocephalus* and *luridicollis* differs in being narrower, less of elytra dark, head and antennæ entirely pale, and tenth-eleventh joints of antennæ different. The eleventh joint is incurved at the middle, with the apical portion narrower and slightly longer than the basal portion; although this is not very wide, its base is closely applied to the tenth, but connected with it only on one side.

Heteromastix apicicornis n. sp.

♂. Black, prothorax (including prosternum), scutellum, and front coxæ flavous, knees obscurely diluted with red.

Head with a shallow, interocular depression. Antennæ rather long and moderately stout, tenth and eleventh joints distorted. Prothorax more than twice as wide as long, sides evenly elevated and widest close to apex. Elytra parallel-sided; with crowded and small rugulose punctures. Abdominal notch distinct. Length, 6.5 mm.

New South Wales: Dorrigo (W. Heron). Type (unique), in South Australian Museum.

A rather large species of the genus, with the black legs and antennæ of *H. laticollis*, but the two apical joints of antennæ very different: the tenth joint is about as long as the ninth, but dilated to apex, curved inwards on the outer side, outwards on the inner side; the eleventh joint is about twice the length of the tenth, and varies in appearance with every point of view; its inner side is incurved between the middle and base, the base appears wide from some directions, very narrow from others; it has a spine directed inwards on the inner side and another directed backwards on the outer side, both being sometimes concealed; from some directions the basal half appears to be scooped out on one side.

Heteromastix undecimus n. sp.

♂. Black and flavous.

Head shallowly depressed between eyes. Antennæ not very long, third joint slightly longer than fourth, the others feebly decreasing in width to tenth, which is feebly notched on one side of apex, eleventh slightly longer than three preceding joints combined, subcylindrical to near apex, when it is suddenly narrowed and

becomes subconical. Prothorax about twice as long as wide, sides evenly elevated. Elytra parallel-sided to near apex; with crowded and small, rugulose punctures. Abdomen with a distinct notch. Tibiæ simple. Length, 4-5 mm.

♀. Differs in having the head slightly smaller, gently convex, antennæ shorter and thinner, tenth joint not notched at apex, eleventh slightly shorter than the three preceding combined, with its tip pointed but not suddenly narrowed and conical, and abdomen not notched.

Queensland: Brookfield, in October (H. Hacker). Types, in Queensland Museum.

The eleventh joint of antennæ of the male is different from that of all the species in which it is truly simple, but, as it is circular in cross-section throughout, the species can scarcely be regarded as belonging to the section in which it is distorted in the male. At first glance the antennæ appear to be twelve-jointed, with the apical joint thinner and about one-fourth the length of the preceding one. The black parts are the head, antennæ (except the two basal joints and part of the third), scutellum, apical two-fifths of elytra, metasternum, and abdomen; the apical joints of the tarsi are also infuscated. The front tibiæ are not dilated at the apex as on the male of *H. tibialis*, which is somewhat similarly coloured. It is larger than on *H. nigri-ventris*, with the head and more of the under surface black.

Heteromastix flaviventris n. sp.

♂. Black, prothorax and abdomen flavous.

Head with several feeble interocular impressions. Antennæ rather stout, extending to tip of first segment of abdomen, joints feebly serrated, third slightly stouter and shorter than fourth, the others to tenth subequal in length but becoming slightly thinner, eleventh subcylindrical, about one-third longer than tenth. Prothorax not quite twice as wide as long, sides evenly elevated. Elytra parallel-sided to near apex; with dense and small, rugulose punctures. Abdomen with a deep apical notch. Length, 5.5-6.0 mm.

New South Wales: Muswellbrook, in October (W. W. Froggatt). Type, in South Australian Museum.

Readily distinguished from the many species having the upper surface similarly coloured by the pale abdomen.

Heteromastix decipiens Lea.

Three specimens, recently taken near Sydney, evidently belong to this species. The female (hitherto unknown) differs from the male in having the two apical joints of antennæ simple and abdomen not notched; it is scarcely distinguishable from the female of *H. gagaticeps*, but the apical joint of antennæ of the male is longer and thinner than on the male of that species, and its base is different.

Heteromastix megalops Lea.

A male from New South Wales (Mount Wilson) appears to represent a variety of this species. It differs from the type in being larger (4.5 mm.) and of the legs only the knees are paler, but it has the same large eyes and long antennæ as on the type, and the prothoracic margins are as on *H. pusillus*.

Heteromastix nigripes Lea.

Four specimens from Victoria (Lower Tarwin) in the National Museum probably belong to this species, but are slightly larger than Tasmanian specimens, the antennæ are somewhat thicker, and the two basal joints are paler.

Heteromastix simplex Lea.

A specimen of this species from Mapleton, in the Queensland Museum, differs from the type in having the front and middle femora and tibiæ entirely pale.

Heteromastix mcdonaldi Lea.

Two specimens from the Upper Williams River (New South Wales) probably represent another variety of this species. They differ from the typical form in being slightly narrower, in having the ninth joint of antennæ smaller and more lop-sided, the eleventh joint decidedly longer and thinner, more of the legs black, and basal joints of antennæ pale.

Telephorus nobilitatus Fr.

I previously³ commented upon a variety of this species represented by two specimens from South Australia in the Macleay Museum. There are now numerous specimens of the same variety before me, from South Australia (Reevesby Island, Adelaide, Mindarie, and Karoonda): other specimens differ in having the apical patch of the prothorax divided in the middle by a pale line, and this gradually increases until there is only a small black spot on each side.

Luciola scutellaris n. sp.

♂. Black, prothorax (including lower surface), four front coxæ, and base of femora, and less of hind legs reddish flavous. With fine pubescence.

Head widely concave in middle and with rather dense punctures. Prothorax about twice as wide as long; with rather coarse, crowded punctures, and a distinct median line. Elytra with dense punctures; with two feeble ridges on each, and remnants of still more feeble ones. Abdomen with fourth segment and part of the fifth white. Length, 4.5-5.0 mm.

♀. Differs in having the head smaller, convex between eyes, and these smaller and only fourth segment of abdomen white.

North Australia: Groote Eylandt and Connection Island (N. B. Tindale). Type, in South Australian Museum; cotype, in Queensland Museum.

Consistently smaller than *L. humilis*, and scutellum blackish, but possibly it should be regarded as a variety only of that species. On the male the fourth segment of the abdomen is entirely white, on the fifth the white part does not extend to the sides, but is produced in the middle almost to the apex, much as on the males of *humilis*, all the many specimens of which before me have the scutellum no darker than the prothorax.

A specimen from Queensland (Stewart River, H. M. Hale and N. B. Tindale) probably belongs to the species, but has the legs entirely dark.

³ Lea, Trans. Ent. Soc. Lond., 1909, p. 117.

***Atyphella brevis* Lea.**

There are in the Queensland Museum four specimens on one card, of which two are males of this species; they differ from the type in being slightly darker; the two others are larvæ-like forms, and are possibly females (hitherto unknown) of the species.

***Atyphella lychnus* Oll.**

Six males, from Mount Tambourine, taken in November, probably belong to this species; they differ from typical males, from Mount Wilson, in being slightly narrower, slightly brighter, and in the less pronounced infuscated blotch of the pronotum.

***Laius semimaculatus* n. sp.**

♂. Reddish flavous, base of head, scutellum, metasternum, and parts of middle and of hind femora black or infuscated; apical joints of antennæ slightly infuscated, elytra metallic blue at base, purple at apex. Sparsely pubescent, and with straggling, greyish hairs.

Head with small punctures, with an obliquely flattened space in front. Antennæ with first joint large, curved, and dilated in front, second minute and almost concealed, third large, slightly longer than first, apex oblique, upper surface with two shallow impressions in front and a semi-double one behind, its lower surface evenly convex, the following ones small, but apical one almost as long as the two preceding combined. Prothorax slightly transverse, sides strongly rounded, with a wide depression at base; with minute punctures in middle, and some coarse ones on sides. Elytra slightly dilated from beyond the basal fourth, sides and suture thickened; with crowded punctures of moderate size, less crowded on some of the blue and purple parts than elsewhere. Front femora stout, strongly impressed in middle in front; second joint of front tarsi with a curved, black rim. Length, 3.5 mm.

North-west Australia: Forrest River (J. Clark from W. Crawshaw). Type (unique), in South Australian Museum.

Larger than *L. tetrastictus*, base of head dark, basal and apical marks not completely divided into spots at suture, and punctures different. &c. Without the prothoracic punctures of *L. purpureiceps*, which has head purplish, &c., The dilated third joint of antennæ is wider than on *L. trifoveicornis*, although the impressions are somewhat similar, but the two species are otherwise very different. The blue part of the elytra covers about the basal fourth, is sinuous posteriorly, and tipped with purplish; the purplish apex appears to be two large conjoined spots, extending to the apical third in middle, but only about the apical fifth at the suture. The dark part of the head has its front terminated in an incurved line connecting the eyes.

***Laius v-flavus* n. sp.**

♂. Black, front of head with a V, parts of dilated joints of antennæ and most of elytra flavous, abdomen and tibiæ obscurely flavous in parts. With sparse and minute pubescence, and straggling, black hairs.

Head with sparse punctures, more numerous in middle of base than elsewhere, with feeble interocular impressions. First joint of antennæ dilated to apex, on one side of which there is an acute projection or spine, third large and widely transverse,

irregularly concave on upper surface and convex on lower, apical joint one half longer than subapical. Prothorax moderately transverse, sides strongly rounded, with two transverse basal elevations; with crowded and small punctures on sides, inconspicuous in middle. Elytra feebly dilated to beyond the middle; with crowded and small but fairly sharp punctures, becoming subgranulate on the postmedian spots. Front femora with a deep impression at apical third, second joint of front tarsi with a narrow, black rim. Length, 2 mm.

Queensland: Bathurst Head (H. M. Hale and N. B. Tindale). Type (unique), in South Australian Museum.

At first glance apparently belonging to *L. melanoderes*, but head with a pale V in front, head and prothorax with much sparser punctures, and basal joint of antennæ armed in front. The pubescence is also sparser, and the black hairs are longer and more numerous. The black parts of the elytra are the basal fourth and a large round postmedian spot on each, touching the side but not the suture.

Laius maculiventris n. sp.

♂. Flavous, some parts reddish flavous, head (except for a large pale apical spot), scutellum, metasternum, and a transverse spot on each side of most of the abdominal segments black, apex of hind femora and apical joints of antennæ infuscated; elytra with four large purple spots. With long, straggling, black pubescence.

Head gently convex, with distinct but irregularly distributed punctures. Basal joint of antennæ stout, curved, dilated to apex and unarmed, third decidedly transverse, somewhat lopsided, irregularly concave on upper surface, convex on lower. Prothorax moderately transverse, sides strongly rounded, base widely depressed; with dense punctures on sides, sparse elsewhere. Elytra with sides feebly dilated beyond the basal fourth; with crowded and fairly coarse punctures, but absent from parts of the purple spots. Front femora with a deep median impression, second joint of front tarsi with a curved black rim. Length, 2.75 mm.

Western Australia: Geraldton (J. Clark). Type (unique), in South Australian Museum.

The elytral markings are much as on *L. cyrensis*, but the head is pale in front, and the true third joint of antennæ is very different. *L. carus* has basal joint of antennæ armed and with a black line, hind legs black, &c. *L. pallidus* has head entirely pale and third joint of antennæ of very different shape. *L. sinus* is a narrower species, with true third joint of very different shape. *L. tetrastictus* has true third joint longer than wide, instead of transverse, &c. The large elytral spots are basal and postmedian, the basal spots are rounded posteriorly, and touch the sides but not the suture, the postmedian spots are briefly elliptic, somewhat obliquely placed, and touch the sides for a short distance, but not the suture: the terminal joints of antennæ are deeply infuscated, but the infuscation decreases till near the dilated joints it almost vanishes.

Laius longus n. sp.

♂. Black, in parts with a purplish gloss, other parts flavous and almost white. Finely pubescent, and with not very long, scattered setæ.

Head with dense punctures and opaque, except for a shining, submedian space. Basal joint of antennæ large and dilated to apex, third wide, irregularly concave

on upper surface, rather strongly convex on lower. Prothorax slightly longer than wide, rather narrow at base and transversely impressed near it; with crowded punctures on a subopaque surface, except that in middle of apical half the surface is shining and almost impunctate. Elytra narrow, subparallel-sided; with crowded and rather small punctures, in places feebly granulate. Front femora rather feebly impressed in middle, second joint of front tarsi with a narrow, black rim. Length, 2 mm.

♀. Differs in having simple antennæ and front legs, smaller head, and less prominent eyes.

North Australia: Roper River (N. B. Tiudale). Type (unique), in South Australian Museum.

A minute species with rather long prothorax and unusual elytral markings. The prothorax is of a dingy flavous, with much of the apex (including the entire margin) deeply infuscated or purplish black, the elytra have a wide, almost white, antemedian fascia, as long as the basal dark portion, but not touching the suture, and there is a large flavous apical spot on the suture, occupying about half the apical width, and more than one-fourth of the sutural length; the metasternum, parts of the abdomen and femora, are black, the rest of the legs and the dilated joints of antennæ are flavous, except that the tarsi are somewhat infuscated. On the male there is a small flavous spot in front of each eye, but it is not traceable on the female.

***Laius fimbriceps* n. sp.**

♂. Flavous and reddish flavous, head black with a slight bluish gloss, the sides in front narrowly flavous, scutellum, metasternum, hind legs (except knees), and parts of middle femora black, elytra with two metallic blue spots at base, and a C-shaped, purple, subapical mark on each. With pale straggling hairs, almost absent from prothorax, but forming a conspicuous basal fringe on head.

• Head gently convex between eyes, shallowly depressed in front: with sparse and minute punctures. Basal joint of antennæ convex, outlines almost equilaterally triangular, third large, irregularly foveate on upper surface, with a strong hollow projection on one side near base, lower surface convex. Prothorax transverse, sides strongly and evenly rounded, widely depressed near base; with sparse and minute punctures. Elytra almost parallel-sided to near apex; with crowded and rather sharply defined punctures, quite as dense on the subapical marks as on the adjacent parts, but absent from most of the basal spots. Front femora deeply impressed in front, front tarsi with a black rim. Length, 5.5 mm.

North-western Australia: Noonkanbah, in December (Dr. E. Mjöberg). Type (unique), in Stockholm Museum.

At first glance apparently belonging to *L. c-purpureus*, but head narrowly flavous on sides in front, the base with a long and conspicuous fringe of pale hairs, and first and third joints of antennæ very different. *L. major* and *tarsalis* are much larger and otherwise different. *L. verticalis* (Macleay, not Fairmaire) has the head concave, differently coloured, and with very different basal joints of antennæ. The spot on each side of base of elytra touches the side but not the suture, and is continued along the middle to the basal fourth, the C-shaped spot on each elytron is obliquely placed, correct on the left side, reversed on the right, the surface close to the spots is paler than elsewhere, but is probably subject to alteration with age. The

conspicuous fringe on the head is longer than the basal joint of antennæ. The impression on each front femur is so deep that it appears to divide it into two parts.

Laius curvicornis n. sp.

♂. Flavous and purple, in parts bluish. With minute pale pubescence, and with long, black hairs.

Head gently convex between eyes, depressed in front: with minute punctures. Antennæ with first joint large, strongly curved, apex obliquely produced, third large, irregularly concave and flavous on upper surface, convex and blackish on under surface. Prothorax transverse, sides strongly rounded, with a shallow depression near base; with small, scattered punctures, becoming fairly numerous on sides. Elytra almost parallel-sided to near apex; with crowded punctures of moderate size, quite as dense on the dark parts as elsewhere. Front femora transversely impressed in front, second joint of front tarsi with a black rim. Length, 5-6 mm.

♀. Differs in having the eyes less prominent, and antennæ and front legs simple.

North-western Australia: Kimberley district, in December (Dr. E. Mjöberg). Types, in Stockholm Museum.

In general appearance somewhat like the preceding species, but the distorted joints of antennæ are differently shaped, the postmedian marks on the elytra are less C-shaped and touch the sides, the basal spots are densely punctate throughout, more of the legs are dark, and the long hairs are dark and do not form a basal fringe on head. The elytral markings are somewhat as on *L. verticalis* (Macleay) and *c-purpureus*, but the head and legs are differently coloured, and the dilated joints of antennæ are differently shaped. *L. tarsalis* is considerably larger, with differently coloured head and legs, very different dilated joints of antennæ, and front legs. *L. major* is also much larger, with very different antennæ and front legs. The head is black with a bluish gloss, with a small pale spot on each side adjacent to an antenna; the elytra have a large purple spot on each at the base, touching the side for a moderate distance, but the suture only at the extreme base, each also has a large postmedian somewhat C-shaped mark (correct on the left reversed on the right) touching the side, and with its beginning enlarged. The mesosternum, metasternum, and legs (except that parts of the front tarsi and the knees are obscurely diluted with red) are black, with a slight purplish gloss, the tip of the abdomen is also dark.

Laius megalops n. sp.

Black, flavous and purple. With sparse, whitish pubescence, and short, white hairs.

Head with a shallow, double depression in front: with dense and irregular punctures about base, sparse elsewhere. Eyes large and prominent. Antennæ rather long and moderately serrated, first joint scarcely half the length of an eye, second minute and normally concealed, third flattened, slightly longer than first and eleventh, and distinctly longer than the others, eleventh about one-third longer than tenth. Prothorax moderately transverse, sides evenly rounded, transversely impressed near base; with a few scattered punctures, becoming more numerous on sides. Elytra very feebly dilated to near apex, sides and suture slightly thickened; surface densely wrinkled, obtusely granulate and punctate. Legs long and thin. Length 4.5 mm.

South Australia : N.E. corner (L. Reese). Type (unique), in South Australian Museum.

It is probable that the type is a male, but even if a female it is very distinct, from the many similarly coloured species, by its large eyes, and long and comparatively thin legs. *L. bellulus* is somewhat similarly coloured, but the punctures on its elytra are deep and sharply defined, although close together. On the present species they are so rugose that they are very ill-defined ; on that species also the eyes are decidedly smaller than the basal joint of antennæ. *L. orthodoxus*, *villosus*, *plagiaticollis* and similarly coloured species, also have much smaller eyes and more sharply defined punctures. *L. sculptus*, which has the third joint of antennæ simple, has much smaller eyes, and peculiar prothorax. The type has the abdomen shrivelled so much that I cannot be certain if the apex is truly notched, as it appears to be. The eyes are much larger than on any other species before me, and the space between them as a result appears concave, although the head itself is there slightly convex. The front femora are not transversely impressed, but several males of the genus have the front femora simple. The second joint of the front tarsi is large, and seems to have an apical fringe, but, as the joint is entirely dark, the apparent fringe may really be due to bristles, rather closer together than usual : certainly the joint itself does not appear to be that of a female. In the male of *L. effeminatus* the antennæ are very similar, but on that species the second joint of the front tarsi is large, reddish, and with a true masculine fringe. The head, antennæ (except that the basal joints are obscurely diluted with red), scutellum, under surface (except prosternum), and legs (except that the knees are obscurely reddish) are black, the elytra are a paler flavous than the prothorax, with the basal fourth and two large postmedian spots or a fascia purple, the basal portion has its posterior end sinuous, the postmedian markings touch the sides and suture, so should perhaps be regarded as forming a fascia rather than spots, the flavous apical portion is much smaller than the median portion.

Laius trisignatus Germ.

A male from the Coorong (South Australia) apparently represents a variety of this species ; it differs from typical specimens in having the prothorax flavous, with a large medioapical blackish spot ; the elytra are purplish, with lateral and apical markings, but the median spot is entirely absent, although the purple is less deep at its position.

Hypattalus pulchripennis n. sp.

♂. Flavous, head, except muzzle, black ; antennæ (basal joints partly pale), tarsi, middle and hind tibiæ, and part of hind femora, black or infuscated, elytra with a broad, purple band, extending from the basal fourth to the apical sixth. With minute, pale pubescence, and straggling, dark hairs.

Head with a shallow depression in front : punctures inconspicuous. Antennæ long and thin, first joint about twice the length of second, the others very feebly increasing in length, but eleventh distinctly longer than tenth. Prothorax strongly transverse, punctures sparse and minute. Elytra parallel-sided to near apex, with rather small but sharply defined punctures. Legs long and thin, front femora moderately curved, trochanters very conspicuous. Length, 2.75-3.25 mm.

♀. Differs in having less of the muzzle pale, more of the antennæ and legs pale, front trochanters inconspicuous, and hind tibiæ spurred.

New South Wales: Upper Williams River, in October (A. M. Lea).
Queensland: National Park, in November (H. Haeker). Male, in South Australian
Museum; female, in Queensland Museum.

In the 1909 table of the genus⁴ this species could be referred to A, as the front femora of the male are distinctly curved (although less so than on several species of the section), with large, projecting trochanters. Of the species placed there *H. mirabilis* and *pulcherrimus* have black antennæ (which are also shorter), legs and scutellum, and the elytra have stronger punctures, and less of their tips pale; the latter species also has much of the pronotum dark. Of the species with spurred hind tibiæ in the female, this is distinct from *H. dentipes* and *calcaratus* by its larger size and bicoloured elytra; the spur is blunt-tipped, and only about half the length of the first tarsal joint, but as it is alike on both tibiæ it is evidently not broken. *H. tricolor*, with bicolorous elytra, has those organs dark blue, except at their tips, and is a much smaller species. From some directions the hind tarsi appear to be but four-jointed, this being due to the second apparently continuing the lines of the first, but from other directions the junction between them is distinct. The purple band on the elytra of the male touches the margins, but on the female these are narrowly excepted, and the pale portion narrowly encroaches on it along the suture.

Hypattalus armipes n. sp.

♀. Black, flavous, and purple. With sparse, whitish pubescence, and short, suberect, dark setæ.

Head gently convex, with minute punctures. Antennæ long, thin, and slightly serrated. Prothorax strongly transverse, with small punctures. Elytra feebly dilated to beyond the middle, the sides then suddenly narrowed and rounded to apex; with dense, sharply defined punctures of moderate size. Legs long and thin, hind tibiæ moderately curved, slightly dilated to apex, and with a long apical spur. Length, 3 mm.

Queensland: National Park, in November (H. Haeker). Type (unique), in Queensland Museum.

Another species with spurred hind tibiæ in female, from the preceding one it differs in having the spur much longer, thinner, and curved (about one-fourth the length of the tibia itself), the elytra with basal and postmedian markings, and their sides very different (approaching those of the female of *H. mucronatus*). The black parts are the head, metasternum, and most of the antennæ and legs; the purple parts are the basal fourth of elytra, and two large postmedian spots, touching the sides but not the suture.

Hypattalus pectinicornis n. sp.

♂. Flavous, head and most of antennæ black, elytra with basal fourth and a somewhat larger postmedian space purple; parts of legs infuscated. With sparse, whitish pubescence, and straggling, dark hairs.

Head strongly transverse; with two small foveæ in front, and with minute punctures. Eyes prominent. Antennæ rather long, first joint about twice as long as second, the latter rounded, third and fourth triangular, fifth-tenth pectinated, the teeth equal or subequal to their supporting joints, eleventh distinctly longer

⁴ Lea, Trans, Ent. Soc. Lond., p. 169.

than tenth. Prothorax strongly transverse, angles rounded off, transversely depressed near base: with sparse and minute punctures. Elytra with sides feebly dilated to beyond the middle, and then evenly rounded to apex; with dense and rather small, but sharply defined punctures. Legs moderately long and thin. Length, 3 mm.

♀. Differs in having less prominent eyes, antennæ shorter and serrated only, and somewhat shorter legs.

Queensland: National Park, in October (H. Hacker). Types, in Queensland Museum.

The male is very distinct from all other known species of the genus by its pectinated antennæ. In the 1909 table of the genus, it could be associated with *H. alphabeticus*, which is a much smaller and otherwise different species. At first glance the female resembles the female of the preceding species, but its hind tibiæ are not spurred, and the sides of the elytra have even outlines. On the female the metasternum is deep black, on the male only its sides are infuscated; on the female also the legs are almost black.

Carphurus nigrivarius n. sp.

♂. Flavous or reddish flavous, with black markings. With sparse whitish pubescence and straggling black hairs.

Head with a large depression on each side in front, with a small oblique elevation near each eye, and a shallow depression in middle, with an impressed median line: dense punctures about base, irregular elsewhere. Antennæ moderately long, third-tenth joints serrated, eleventh slightly longer than tenth, obtusely notched at tip. Prothorax slightly longer than wide, with a wide shallow depression near base, and a few scattered punctures. Elytra with each side strongly incurved between middle and apical third, just before its end with a blunt-tipped process directed obliquely forwards, but one side of the process drawn slightly backwards; with numerous punctures varying from rather small but well-defined, to very small and shallow. Basal joint of front tarsi not very large, with a black inner rim. Length, 6.0-6.5 mm.

Queensland: Stanthorpe, in October (H. Jarvis). New South Wales: Tamworth (A. M. Lea). Type, in South Australian Museum.

Allied to *C. cristatifrons*, but head not crested, and spine on each elytron blunt-tipped. The black parts are a large mediobasal spot on the head, scutellum, a curved mark on each elytron, beginning on the base below the shoulder, and curved round so as to occupy most of the median third, mesosternum, metasternum, five basal segments of abdomen, except tips and sides, parts of femora and tarsi, and six or seven joints of antennæ. On each of two specimens, from Stanthorpe, the apical segment of abdomen is entirely pale, on the Tamworth one only two apical segments are. On the type the curved mark on each elytron does not quite extend to the suture, on the second specimen it touches the suture for its median third; on the Tamworth one it occupies more than the median third and is, in addition, narrowly continued along the suture to the base.

A male from Brisbane, in September (H. Hacker), in the Queensland Museum, appears to belong to this species, but differs from the type in having the process on each elytron thinner and curved backwards so as to appear like a hook (the

process is not exactly alike on the three other specimens), the curved mark on each elytron is narrower, does not touch the suture, and terminates before the base, two apical segments of abdomen are pale, the others, as also the femora, have a smaller proportion black.

***Carphurus incurvipennis* n. sp.**

♂. Flavous; elytra (except part of base) of a rather dingy purple. With sparse, whitish pubescence, and straggling, dark hairs.

Head rather long, with four postmedian and two subapical impressions, base transversely strigose; elsewhere with scattered punctures. Eyes rather large. Antennæ moderately long, feebly serrated, eleventh joint about half the length of first, and distinctly longer than tenth. Prothorax about as long as its greatest width, widely and shallowly depressed near base; with a few scattered punctures. Elytra with dense, sharply defined punctures of moderate size, becoming smaller about base and apex, each side strongly incurved at basal third and then straight to apex. Basal joint of front tarsi with a black inner comb. Length, 6 mm.

Queensland: Brisbane (A. M. Lea). Type, in South Australian Museum.

This species appears to connect the *armipennis* group with the more normal forms, as each side of the elytra is incurved at the basal third, but no part is produced backwards, as on *C. armipennis*, *fasciculatus*, *uncinatus*, *balteatus*, and *purpureipennis*: on the last-named species the part is less produced than on the others, but it is pale at the tip, and parts of the legs and of the antennæ are deep black, whereas on this species the legs (except for the tarsal combs) and antennæ are entirely pale. The curvature of the side of each elytron is not visible from directly above, except that its beginning appears as a small subtriangular tooth. On the type the metasternum, except its episterna, is deeply infuscated, on a second specimen it is scarcely darker than the rest of the under surface. On each there is a small black fascicle between the eyes, so strongly curved backwards that its point actually touches the head; it is probable, however, that it does not always do so.

***Carphurus wilsoni* n. sp.**

♂. Flavous red, coppery green, and black. With sparse, whitish pubescence, becoming fairly dense on elytra, and with straggling, black hairs.

Head moderately large, with a small interocular fovea and four irregular ones in front, a shallow curved impression towards base, base itself transversely strigose and punctate. Antennæ moderately long, rather feebly serrated, eleventh joint distinctly longer than tenth. Prothorax about as long as its greatest width, with a wide irregular impression on apical half, the median part large and rather deep, an irregular impression on each side of base; with scattered punctures, becoming fairly numerous on sides. Elytra slightly dilated posteriorly: with crowded, somewhat rugose punctures of moderate size, becoming smaller but more sharply defined about base and apex. Basal joint of front tarsi moderately long, with a black inner comb. Length, 5.5 mm.

Victoria: Linga, in October. Type (unique), in Mr. F. E. Wilson's collection.

A very distinct species, allied to *C. rhytideres*, from the male of which it differs

in having the subapical impression of prothorax shallower, less of it black, with the oblique subbasal impressions reduced to a fovea on each side, and not marked by black fascicles: the antennæ are also somewhat shorter and thinner, much as on the female of that species. The black parts are the base of the head, seven apical joints of antennæ and part of the preceding one, a small medioapical clothed spot on pronotum, scutellum, mesosternum, metasternum, abdomen (except the tip and the sides of the other segments), femora, and parts of tarsi; the elytra are entirely dark coppery green.

***Carphurus sagittifer* n. sp.**

♂. Flavous; elytra, except basal fifth, apical segment of abdomen, most of middle and of hind legs, and five or six apical joints of antennæ, black or blackish. With sparse pubescence, and numerous not very long, dark hairs.

Head rather large, with two fairly large foveæ in front (open posteriorly, closed in front), a shallow, transverse, postmedian impression; with dense punctures towards base, sparse elsewhere. Eyes rather large and prominent. Antennæ rather long, fourth-tenth joints strongly serrated. Prothorax slightly longer than wide, a shallow transverse impression near apex and another near base; with a few scattered punctures. Elytra comparatively long; with crowded small, rugose punctures. Basal joint of front tarsi about as long as the rest combined, with a black inner comb. Length, 6-8 mm.

♀. Differs in having the head smaller, with shallower impressions, eyes smaller, antennæ slightly shorter, but almost as strongly serrated, and basal joint of front tarsi much shorter and simple.

Queensland: Cairns district (F. P. Dodd). Types, in South Australian Museum.

Belongs to a group of which it is not always easy to decide by a single specimen if it is a male *Carphurus*, or a female *Balanophorus*, but as there are two females, with simple front tarsi, it is certainly a *Carphurus*. In appearance it is fairly close to *C. elegans* and *longus*, but the male of the former has an unusually long basal joint of front tarsi, and the female of the latter has long, thin, and scarcely serrated antennæ. Rather close to *C. compsus*, but each of the sixth-tenth joints of antennæ has its oblique anterior edge at least half as long again as the outer edge (where the joints are attached to each other), but on *compsus* the oblique anterior edge is not as long as the outer edge, so that the serrations on the latter (although decided) are much less pronounced than on the present species; on the female of *compsus* they are not even strongly serrated. The elytra are purplish black rather than a true black, but on one female the dark part has a slight coppery gloss; on each of the females, and on a second male, the middle legs are almost entirely pale. On the type male only the metasternum is partly infuscated. The cephalic foveæ of the male are so placed that their front is bounded by a broad, elevated arrowhead.

***Carphurus armicollis* n. sp.**

♂. Of a dingy flavous brown; mesosternum, metasternum, abdomen, most of legs, palpi, and apical half of antennæ, black or infuscated. With sparse, white pubescence, and straggling, black hairs.

Head with an obtuse median elevation, with shallow impressions before and behind it; with irregularly distributed punctures, dense in parts. Antennæ moderately long, slightly serrated. Prothorax distinctly longer than wide, with two acute points marking a distinct medioapical notch; with numerous irregularly

distributed punctures. Elytra moderately long; with dense, sharply defined punctures, becoming sparser and smaller on tips. Basal joint of front tarsi moderately long, with a black inner comb. Length, 3.5-4.0 mm.

Queensland: Cairns district, trapped by sticky seeds of *Pisonia brunoniana* (F. P. Dodd). Type, in South Australian Museum.

Evidently allied to *C. marginiventris* and *pallidipennis*, but distinguished from both by the nonmaculate prothorax: the male of the latter has the prothorax notched in front, but the notch is narrower than on the present species, on which it is about twice as wide as long, with the sides produced forwards as rather short but sharp points. There is a small granule on each elytron in the middle of the basal third, as on the former species, but as it is no darker than the adjacent parts it would probably not be seen, unless looked for. On the type there appears to be a distinct median earina on the pronotum, on a second specimen it is less defined but traceable. Two males were obtained; *C. pisoniae* (of which many more males were recently obtained, that were trapped by the same seeds) has armed elytra.

***Carphurus armiceps* n. sp.**

♂. Flavous; apex of elytra, part of metasternum, apical segment of abdomen, and a median blotch on most of the others, and seven apical joints of antennæ, blackish or deeply infuscated. With sparse pubescence, and rather numerous, dark hairs.

Head fairly large, with a large interocular excavation, and a smaller but still large one on each side towards the base, between the latter a strong curved process, which in front hangs over the interocular excavation and is tipped with black hairs. Eyes rather large and prominent. Antennæ rather long, fifth and sixth joints produced inwards and truncate, seventh-tenth serrated, eleventh distinctly longer than tenth. Prothorax longer than wide, shallowly impressed towards base, with two small foveæ in the middle of apex, the adjacent parts slightly infuscated, with small, scattered punctures. Elytra moderately long, slightly dilated posteriorly; with numerous small punctures. Basal joint of front tarsi not very long, with a black inner comb. Length, 5.5 mm.

Queensland: National Park, in November (H. Hacker). Type (unique), in Queensland Museum.

Readily distinguished from all previously described species by the antennæ; the sculpture of the head and prothorax are also distinctive. From the sides the strong elevation on the head has a claw-like appearance, from directly above it is seen to be concave, with the sides as narrow ridges conjoined in front; there is a small fasciæ on the head below its tip. The elytra are semi-transparent, and although only about the apical fourth is really infuscated, more than half of the apex appears dark, owing to the black wings being partly visible; the elytral punctures are small but fairly sharp.

***Carphurus modicus* n. sp.**

♂. Flavous; elytra, except extreme base, purplish black, femora, most of tarsi, and eight apical joints of antennæ, black or deeply infuscated. With fine, white pubescence, and straggling, dark hairs.

Head with a curved impression in front, with three elevations between eyes, the median one small, the others long and semi-double; with dense punctures,

about base transversely strigose. Antennæ not very long and moderately serrated. Prothorax slightly longer than the greatest width, widely depressed near base: sides with sharply defined punctures, elsewhere sparse and small. Elytra with crowded and rather small, but sharply defined punctures. Basal joint of front tarsi with an inner black comb. Length, 5 mm.

Queensland: Kuranda, in February (F. P. Dodd). Type, in South Australian Museum.

The eyes are much smaller than on *C. vigilans*, which is somewhat similarly coloured, and the interocular elevations are different. On the type each elytron is suddenly dilated from the basal third, but this is almost certainly due to post-mortem shrinkage.

A specimen from Kuranda, taken by Mr. Dodd in December, agrees so perfectly in all details of colour and sculpture, except of parts of the head, with those of the type, that it evidently belongs to the species. On it the curved frontal impression of the type is interrupted in the middle by a bottle-shaped extension of the median elevation, much as on the head of *Helcogaster bacchanalis*: between this and each eye are two small elevations completely divided, instead of semi-double. Its elytra are parallel-sided throughout, and clasp the abdomen in the usual way.

***Carphurus pallidipennis* Mael. var. *excrementarius* n. var.**

A male from the Upper Williams River (New South Wales) evidently belongs to this species, as the median apex of the prothorax has the conjoined foveæ of the species, as previously noted,⁵ but each elytron has a small and conspicuous blackish granule at the middle of the basal third (the two look just like fly-specks); on the previously noted specimens they are paler and just traceable.

***Carphurus marginiventris* Fairm.**

The starting point of the longitudinal infuscation on each elytron of this species is marked by a small granule that could be easily overlooked on some specimens, but is very distinct on others.

***Helcogaster bifoveiceps* n. sp.**

♂. Deep shining black, elytra whitish flavous, a rounded space about scutellum (occupying about the median third of base) and apical third, black or blackish; parts of front legs and basal half of antennæ obscurely reddish. With scattered, black hairs.

Head flattened, with two small round foveæ in front. Antennæ rather short and feebly serrated. Prothorax moderately transverse, sides rounded, almost impunctate. Elytra slightly longer than head and prothorax combined, sides feebly dilated to near apex; almost impunctate. Basal joint of front tarsi moderately long, with a black inner comb. Length, 3 mm.

♀. Differs in having the frontal foveæ smaller, and shallower, the antennæ slightly shorter, and the elytra and abdomen wider.

Victoria: Mooroopna, in January (F. E. Wilson). Types, in South Australian Museum: cotypes, in Mr. Wilson's collection.

⁵ Lea, Trans. Ent. Soc. Lond., 1909, p. 193.

A black species with partly flavous, almost white, elytra; of several similarly coloured species, *H. opaciceps*, *cribriceps*, and *medioflavus* have differently sculptured head and longer and distinctly serrated antennæ; *opaciceps* also has more of the base of the elytra dark, and *medioflavus* has less. *H. flavipennis* has paler antennæ and elytra, and differs slightly in the sculpture of the head. The head of the male is distinctly bifoveate, but is not strongly sculptured otherwise. The female has the frontal foveæ somewhat smaller than on the male, but has a fairly distinct median line, which is scarcely traceable on the male. Under the microscope the comb of the front tarsi is seen to be composed of about thirty teeth.

***Helcogaster medioniger* n. sp.**

♂. Deep shining black, head dull flavous, with a complete median black vitta, basal third of antennæ and parts of legs pale. Glabrous, except for minute pubescence almost confined to legs.

Head wide and somewhat flattened near eyes, with an interocular impression, margining which are three small elevations, two in front and one behind. Antennæ rather long and feebly serrated. Prothorax moderately transverse, with a rather deep transverse impression near base; with scattered punctures. Elytra with minute, rugose punctures. Basal joint of front tarsi with a conspicuous black inner comb. Length, 1.8–2.0 mm.

New South Wales: Upper Williams River, in October (A. M. Lea). Type, in South Australian Museum.

In many respects close to *H. cælocephalus*, but on the male of that species the head, when viewed from behind, is seen to have four triangular elevations—two black median ones and a pale one near each eye; the head of the present species is flat near the eyes, and although there are three dark median elevations they are not distinct when viewed from behind. The colours, except that the legs are more variegated, are much as on *H. triangulifer*, but the head is very differently sculptured. The head is pale, with a dark median vitta appearing parallel from some directions; parts of all the tarsi, the middle and hind knees and tips of tibiæ, the front tibiæ and most of front femora, are more or less flavous.

***Helcogaster holomelas* n. sp.**

♂. Deep shining black, parts of the mouth obscurely dilated with red. Head minutely pubescent, elsewhere almost glabrous.

Head convex, with a reversed V-shaped impression, caused by two conjoined foveæ in front, and with a faint interocular impression. Antennæ moderately long and feebly serrated. Prothorax moderately transverse, with a rather deep transverse subbasal impression; with a few scattered punctures. Elytra with fairly numerous but minute wrinkled punctures. Length, 2.5–3.0 mm.

♀. Differs in having the head smaller, with shallower impressions, the antennæ slightly shorter, and the front tarsi simple.

Queensland: Somerset and Mabuiag Island (C. T. McNamara). Types, in South Australian Museum.

An entirely black species, except for the obscure muzzle, but larger than *H. gaganinus*, and frontal impressions shallowly connected so as not to be two

isolated foveæ. The variety *tasmanicnsis*, of that species, is quite as large, but its frontal impressions are different. *H. effeminatus* is similarly coloured, but differs in the front of the head and has longer and distinctly serrated antennæ. *H. puncticeps* has head conspicuously punctate and different in front. As the legs are entirely black the comb of the male is not distinct under a magnifying glass, but under the microscope the basal joint of the front tarsi is seen to be curved, and to have a comb of numerous teeth.

A male from Murray Island (A. M. Lea) appears to belong to the species, but is slightly larger (3.5 mm) and has more of the muzzle obscurely pale.

***Helcogaster trifoveatus* n. sp.**

♂. Deep shining black, head partly flavous, three basal joints of antennæ and parts of front legs obscurely pale. Almost glabrous.

Head wide, with three conjoined foveæ between eyes, the median one small, each of the others slightly larger than an eye. Antennæ rather long and moderately serrated. Prothorax moderately transverse, transversely impressed near base; with small, scattered punctures. Elytra with scarcely visible punctures. Length, 2.0-2.2 mm.

Queensland: Brisbane, in August and September (H. Hacker). Type, in Queensland Museum: cotype, in South Australian Museum.

With the general appearance of *H. triangulifer*, but the head has a trilobed excavation of which each side consists of a well-defined fovea, and the middle of a smaller one; as a result the middle of its posterior margin is incurved, whereas on that species the middle of the excavation is triangularly produced forwards, besides being otherwise different. The excavation, except at the sides, and the base of the head are black. As the front tarsi are black the comb of the male is scarcely visible under a magnifying glass.

Mounted on the same card with the type male is a female, that differs from it in being longer, the head less dilated, nonfoveate, only part of the muzzle pale, the antennæ shorter, less serrated, and the front tarsi without a comb. It is probably correctly mated, but I can scarcely distinguish it from some females of *H. foveiceps*. In fact, at present, as on former occasions, I have had to pass over many females of the genus as being impossible of differentiation, although the males have very distinctive features in the head and prothorax.

***Helcogaster frater* n. sp.**

♂. Black: prothorax flavous, under surface of three basal joints of antennæ, front tibiæ, and parts of tarsi, and middle and hind knees obscurely pale. Head sparsely clothed, elsewhere glabrous or almost so.

Head with a large, curved, shining impression near each eye, the two connected by a smaller semi-double impression, between middle and apex a somewhat convex space, with a feeble median line; in places punctate but not strigose. Antennæ moderately long and very feebly serrated. Prothorax almost as long as the greatest width, with a wide subbasal impression; almost impunctate. Elytra moderately long, scarcely visibly punctate. Basal joint of front tarsi moderately long, with an inner black comb. Length, 3 mm.

New South Wales: Tamworth (A. M. Lea). Type (unique), in South Australian Museum.

In general appearance strikingly close to *H. strigiceps*, but the head is not strigose, and the impressions are different; just inwards of each eye, and slightly longer than it, there is a deep, curved, polished impression, the interspace being opaque, densely punctate and with a feeble semi-double impression. Seen from behind the head appears to have two minute interocular elevations, partly obscured by black setæ: from some directions the base of the excavation appears almost evenly quadrisinuate. The antennæ also are decidedly longer, most of the joints being longer than wide: on that species they are mostly transverse. On *H. atriceps* the eyes are smaller, the head is densely punctate almost throughout, and the impressions are different. The mediobasal sinus decidedly narrower than the lateral ones distinguishes from the description of *H. nigriceps*. In some lights the elytra appear somewhat purplish.

***Helcogaster apiciniger* n. sp.**

♂. Reddish flavous: apical three-fourths of elytra (less on the sides), part of metasternum, two apical segments of abdomen, tip of the preceding one, and seven apical joints of antennæ black, tarsi and parts of middle and of hind tibiæ infuscated. In parts with very fine pubescence, and with a few short, scattered hairs.

Head with a large trilobed median excavation, a conspicuous tubercle arising from the middle part, and sloping down to the front. Antennæ long and feebly serrated. Prothorax slightly longer than wide, with a wide depression near base: almost impunctate. Elytra rather long, with minute, scattered, rugose punctures. Basal joint of front tarsi rather long, with an inner black rim. Length, 4.5 mm.

♀. Differs in having the head smaller and almost entirely black, non-excavated, with an obtuse median ridge from middle to apex, antennæ thinner and front tarsi simple.

New South Wales: Upper Williams River (F. E. Wilson and A. M. Lea). Types, in South Australian Museum.

Of the species with bicoloured elytra and abdomen tipped with black in the male, it differs from *H. bacchanalis* and *trisinuatus* in the strong interocular elevation. The base of the cephalic excavation trisinuate distinguishes from *H. tuberculiceps*, *calodemus*, and *seticeps*. There is a faint bluish gloss on the dark part of the elytra. From behind the trisinuate excavation of the head disappears, but there is a conspicuous triangular median elevation.

***Helcogaster abdominalis* n. sp.**

♂. Flavous: apical third of elytra, metasternum, a spot on each segment of abdomen, the apical one, and six or seven apical joints of antennæ black or blackish, apical joints of tarsi slightly infuscated. With sparse and comparatively short, blackish hairs.

Head with a deep interocular impression, its base trisinnate, with three small elevations in front; base punctate and transversely strigose. Antennæ rather long and feebly serrated. Prothorax slightly longer than wide, rather deeply transversely impressed near base; with a few small scattered punctures. Elytra feebly dilated posteriorly, scarcely visibly punctate. Basal joint of front tarsi moderately long, with a small black inner comb. Length, 4-5 mm.

♀. Differs in having a wide shallow impression on the front of the head, which is non-tuberculate, antennæ thinner and even less serrated, abdomen wider and front tarsi simple.

New South Wales : Upper Williams River (F. E. Wilson and A. M. Lea).

The colours, except for the spotted abdomen, are as on *H. trisinuatus*, but the head is differently sculptured, the trisinate base of the excavation distinguishes from *H. rhyticephalus*, and less of the abdomen is spotted, &c. The median sinus of the head is wider than the lateral one : seen from behind there appear to be three small elevations, a blunt median one (placed in front of the excavation), and a small acute one on each side of it (each placed near an antenna) : from the sides there appear to be three small tubercles on each side : the median one, one near each antenna, and the front end of the median sinus. There is a small black spot at the base of the head, but it is normally concealed by the overlapping prothorax. A second male has rather more of the elytra dark than the type. The only female in the Museum, that appears to belong to the species, has the scutellum black, the apical half of elytra (except the extreme margins) black, with the black triangularly advanced on the suture, and the tip of abdomen, as well as a spot on each segment, black.

Helcogaster affinis n. sp.

♂. Flavous : base of head, scutellum, apical half of elytra, metasternum, abdomen, and seven apical joints of antennæ black or blackish. Sparsely pubescent.

Head with an interocular impression trisinate posteriorly. Antennæ moderately long and feebly serrated. Prothorax slightly longer than the greatest width, widely transversely depressed near base : with a few scattered punctures. Elytra with minute, wrinkled punctures. Basal joint of front tarsi with a black inner comb. Length, 3 mm.

♀. Differs in having the head more convex and narrower across eyes, with two small frontal depressions and a shallow median line, more of its base blackish, antennæ thinner and not serrated, parts of the legs infuscated and front tarsi simple.

New South Wales : Upper Williams River (A. M. Lea). Types, in South Australian Museum.

The head of the male is not longitudinally sulcate to base, as on the male of *H. suliceps*, which it greatly resembles, and the antennæ are longer. The excavation of the head is somewhat obscured by pubescence, it is trisinate posteriorly, but the median sinus is rather small ; there is a small median elevation, but it is not visible when the head is viewed from behind ; the only sharply defined punctures on the head are on the black basal spot.

Helcogaster tuberculiceps n. sp.

♂. Flavous ; apical two-thirds of elytra, metasternum, two apical segments of abdomen, and seven apical joints of antennæ black, palpi and parts of tarsi infuscated. Sparsely pubescent and with a few dark hairs, more numerous on head and tip of abdomen than elsewhere.

Head with a wide interocular depression, evenly curved posteriorly ; with a strong median tubercle sloping down to the apex ; base rather densely punctate. Antennæ long and feebly serrated. Prothorax about as long as its greatest width, widely depressed near base ; with a few scattered punctures, the sides feebly

wrinkled. Elytra feebly dilated posteriorly; with fairly numerous but not dense, small, rugose punctures. Basal joint of front tarsi with a small black inner comb. Length, 3 mm.

New South Wales: Upper Williams River (A. M. Lea). Type, in South Australian Museum.

In many respects near *H. tuberculifrons*, but on the male of that species the head is partly dark, and the tubercle when viewed from behind appears semi-double⁶; on the present species when so viewed it appears to be higher and flat-topped, although hardly T-shaped. The colours are almost exactly as on *H. apiciniger*, but on the male of that species the excavation is trisinate posteriorly, and the elevation is larger and obtusely pointed, as viewed from behind.

A female on the same card as the type possibly belongs to the species; it differs in having the head narrower and more convex, obliquely flattened in front, not excavated or tuberculate, black except for parts of muzzle, with more conspicuous punctures, antennæ thinner and not serrated, abdomen entirely black, and front tarsi simple.

Helcogaster calodemus n. sp.

♂. Flavous, in parts reddish flavous; head, except the elevated parts in front, apical three-fifths of elytra, two apical segments of abdomen, and seven apical joints of antennæ black. With fairly numerous dark hairs and in parts sparsely pubescent.

Head with an obtuse median elevation, crowned with two short longitudinal ridges; with fairly numerous punctures, the base, more noticeably on sides than middle, transversely strigose. Eyes large and prominent. Antennæ long and feebly serrated, only the second joint transverse. Prothorax slightly longer than wide, widely depressed near base; with small, scattered punctures. Elytra comparatively long; with minute rugose punctures. Basal joint of front tarsi rather long, with a black inner comb. Length, 6 mm.

Queensland: Brisbane (H. Hacker). Type (unique), in Queensland Museum.

The colours are much as on *H. tuberculifrons*, except that more of the head is dark, but it differs from that species in being much larger, the eyes larger, with the frontal elevation smaller in proportion, black at the base and with two small disconnected, reddish elevations. Seen from behind the head appears much as figured for that species⁶ except that the elevations are more conspicuous. There is also a narrow ridge from each eye to the base of an antenna.

Helcogaster seticeps n. sp.

♂. Flavous or reddish flavous; apical three-fourths of elytra, apical segment of abdomen, and most of the preceding one black, four or five apical joints of antennæ and parts of tarsi infuscated. With straggling black hairs, and in parts sparsely pubescent.

Head with an obtuse median elevation connected with the apex by an obtuse ridge, a large shallow fovea near each eye. Antennæ rather long and feebly serrated.

⁶ Lea, Trans. Ent. Soc. Lond., 1909, pl. ii, fig. 10.

Prothorax longer than its greatest width, widely depressed near base; with minute, scattered punctures. Elytra moderately long, slightly dilated posteriorly; with minute rugose punctures. Basal joint of front tarsi with a black inner comb. Length, 4.0-4.5 mm.

♀. Differs in having the head almost entirely black, the antennæ thinner and even less serrated, less of the elytra black, and the front tarsi simple.

Queensland: Mount Glorious, in September (H. Hacker). Types, in Queensland Museum.

The colours are much as those of *H. tuberculifrons*, and of the preceding species, except that the base of the head is not dark: from the former it also differs in being considerably larger; the latter has larger eyes and the head without foveæ. *H. tuberculiceps* is similarly coloured, but the tubercle and excavation on the head are different. The females are scarcely to be distinguished from the females of several other species. The median elevation on the head of the male is obscured by rather numerous black setæ, which almost conceal a narrow transverse impression, behind it, from some directions, they seem to be compacted into two short transverse rows, this being due to an almost concealed transverse impression between them. Close to each eye there is a rather large fovea, appearing simple from some directions, semi-double from others.

Helcogaster gagatinus Lea.

Seven specimens, from the Cairns district, belong to this species, and, apart from slight differences of shades of colour of the front legs, agree so closely with the typical form that it does not appear desirable to name them as varietal.

Helcogaster foveiceps Lea.

Some males from Ringwood (Victoria), in the National Museum, differ from typical specimens, with which they were taken, in having the prothorax with a narrow blackish basal fascia up to almost entirely black; they have the median joints of antennæ more deeply infuscated than usual; one female has one of the apical joints pale. Numerous males from Brisbane, Sunnybank, and Mount Coot-tha, in the Queensland Museum, have the median joints of antennæ more lightly infuscated than usual; on two of them, in fact, the antennæ are uniformly pale. Several females, taken with them, have some of the apical joints of antennæ pale.

Helcogaster medioapicalis Lea.

A male from Sydney differs from the type in having the prothorax entirely pale, with the medioapical notch smaller.

Neocarphurus seminiger n. sp.

♂. Flavous and deep, shining black. Very sparsely clothed.

Head with a large interocular tubercle, on each side of which is a distinct fovea, base with rather dense punctures. Antennæ long and thin, scarcely serrated. Prothorax distinctly longer than wide, convex in front and much wider there than near base, where there is a deep transverse impression, sides finely longitudinally strigose, elsewhere with minute punctures. Elytra about as long as head and prothorax combined, with a large subtriangular impression on each side at apical

third, almost impunctate. Legs long, basal joint of front tarsi with a small, black, inner comb. Length, 3 mm.

Queensland: Somerset (C. T. McNamara). Type (unique), in South Australian Museum.

Allied to *N. semiflavus*, but antennæ thinner (only the second joint transverse), elytra with the black part obtusely advanced suturally, nowhere opaque, and impressed on each side near apex. The flavous parts are the head, prothorax, basal fourth of elytra (shoulders infuscated), prosternum, mesosternum, antennæ (three apical joints infuscated), and legs (tibiæ slightly infuscated). The cephalic tubercle, from behind, appears simple, from the sides it is seen to be slightly impressed in the middle.

***Neocarphurus insignis* n. sp.**

♂. Black and flavous. With sparse white pubescence and straggling hairs on abdomen, legs, and basal joint of antennæ.

Head large, surface very uneven: clypeus long, with a median elevation. Eyes large, lateral, and pointed in front. Antennæ thin, none of the joints transverse. Prothorax longer than wide, sides narrowed from apex to base, which is strongly depressed, apex obtusely incurved at middle; with a median line distinct on basal half, and traceable to apex; with small, rugose punctures. Elytra parallel-sided, slightly longer than head and prothorax combined; with dense, sharply defined punctures of moderate size. Legs long and very thin, basal joint of front tarsi with a black inner comb. Length, 4 mm.

New Guinea: Finsch Haven (Rev. L. Wagner). Type, in South Australian Museum.

The dense and sharply defined punctures on the elytra are at variance with all other species of the genus, but the wide apex of prothorax, its strongly narrowed and greatly depressed base, and eyes (when wet) of a brilliant emerald green, are as on others of the genus; which is now first recorded from New Guinea. On the type there is a compound interocular elevation, with a small spine directed forwards; between it and each eye there is a round fovea, the two obtusely connected in front, behind it there is another fovea, which is continued under the apex of prothorax; behind each eye there is also a fovea, which is distinct only from the side. On a second specimen the head has the mediobasal fovea quite as large as on the type, the postocular foveæ are similar, but the space between the eyes and in front is irregularly undulating, rather than foveate and tuberculate. The differences are evidently due to post-mortem shrinkage. The flavous parts are the head, prothorax (except for a large triangular basal infuscation), shoulders, prosternum, mesosternum, metasternal episterna, legs (except hind coxæ), and antennæ (the apical joints slightly infuscated). The abdomen, when not contracted, is longer than the elytra.

***Neocarphurus coatesi* Lea.**

Four specimens (sexes) of this species, from the National Park of Queensland, differ from the types in having the apical two-thirds of prothorax deeply infuscated or blackish.

***Balanophorus biplagiatus* Fairm.**

Two specimens (sexes) from Cairns possibly belong to this species (described originally as from Peak Downs). They differ, however, from the description in

having the apical fourth of elytra obscurely infuscated, the abdomen uniformly pale, of the legs only the tarsi infuscated, and that seven of the apical joints of antennæ are infuscated. In the original description the parts noted were described as follows: "*elytris . . . apicem macula fusca transversim signatis, abdomine . . . apice late nigro. . . . pedibus fuscis, antennis . . . articulo ultimo obscuro.*" The antennæ were also described as "*ab articulo tertio longe flabellatis.*" On the Cairns male the antennal pectinations are rather shorter than usual in the genus, although decidedly longer than on *Carphurus*; it also has a small interocular spot. The female differs from it in having the antennæ strongly serrated only, the head immaculate, and the hind femora narrowly infuscated on the upper surface.

Balanophorus mastersi Mael.

A male without locality label, in the South Australian Museum, but probably from South Australia, differs from normal males in having the antennal rami much shorter, only about half as long as the width of the head, instead of as long as its widest part.

Balanophorus concinnus Lea.

A male from Cairns agrees well with the type, except that the hind legs are pale, with the exception of the infuscated tarsi.

